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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,769	03/11/2004	Kyle A. Ray	CON26 P-306	6436

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EXAMINER

MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,769

Applicant(s)

RAY ET AL.

Examiner

Matthew D. Matzek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-21 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/11/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-12 and 15-21, drawn to a thermoformable acoustic sheet, classified in class 442, subclass 1.
- II. Claims 13 and 14, drawn to a vehicle, classified in class 180, subclass various.

The inventions are distinct, each from the other because of the following reasons:

1. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as insulation for a number of items including speakers and home insulation and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Gunther Evanina on 11/22/2005 a provisional election was made without traverse to prosecute the invention of an acoustic sheet, claims 1-12 and 15-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13 and 14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claim 19 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Independent claim 15 recites an impermeable polymer film and dependent claim 19 also recites that the polymer film layer is impermeable.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to which fibers of claim 8 are to be polyethylene terephthalate. Applicant is directed to please clarify.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-12 and 15-21 are provisionally rejected under the judicially created doctrine of double patenting over claims 2-10, 12 and 15-21 of copending Application No. 10/437,356. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a thermoformable acoustic sheet comprising common materials, basis weights, thicknesses, structure and composition.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 7 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Copperwheat (US 6,008,149).

Copperwheat teaches an article comprising a thermoformable fabric (barrier layer) and a layer of variable compression fabric (absorber layer) (Abstract). The absorber layer comprises polyester fibers and is folded into a vertically-lapped fabric of a basis weight of $\sim 63\text{g/ft}^2$ and a thickness of 20mm (col. 5, lines 9-19, conversion done by Examiner). The barrier layer may have basis weights of between ~ 13 and $\sim 57\text{ g/ft}^2$ and may also be made of polyester (col. 4, lines 1-12, conversion done by Examiner). An intermediate adhesive fabric may be placed between the absorber and barrier layers (col. 2, lines 43-44). The barrier layer may be a needlepunched felt (col. 4, lines 13-15). The article of Copperwheat may be used as an automobile liner or headliner (claims 19 and 20).

Automobile liners and headliners are subject to extreme heat and cold and serve to insulate the vehicle's passengers from exterior sound. As the article of Copperwheat is thermoformable it is to be a molded article and meets the structural and compositional limitations set forth in claim 1 the article may serve as a molded acoustic panel.

Copperwheat teaches the use of an intermediate adhesive fabric may be placed between

the absorber and barrier layers, but is silent to the use of a continuous polyolefin film layer (col. 2, lines 43-44).

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Copperwheat (US 6,008,149).

Although Copperwheat does not explicitly teach the claimed feature of the barrier layer having an airflow resistance from about 200 to about 300 Rayls or less than 100 Rayls, it is reasonable to presume that said properties are inherent to Copperwheat. Support for said presumption is found in the use of like materials (i.e. a barrier layer of common materials and basis weights). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of barrier layer having an airflow resistance from about 200 to about 300 Rayls or less than 100 Rayls would obviously have been present one the Copperwheat product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as unpatentable over Copperwheat. The invention of Copperwheat is silent as to the use of vertically-lapped fibers in the barrier layer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the barrier layer of vertically-lapped fibers. The skilled artisan would have been motivated to make the already sound and vibrational absorbent article of Copperwheat more so with what would amount to a second absorber layer.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Copperwheat (US 6,008,149) as applied above to claim 1 and further in view of O'Donnell et al. (US 2003/00823860).

a. Copperwheat teaches an article comprising a thermoformable fabric (barrier layer) and a layer of variable compression fabric (absorber layer) (Abstract). The absorber layer comprises polyester fibers and is folded into a vertically-lapped fabric of a basis weight of $\sim 63 \text{ g/ft}^2$ and a thickness of 20mm (col. 5, lines 9-19, conversion done by Examiner). The barrier layer may have basis weights of between ~ 13 and $\sim 57 \text{ g/ft}^2$ and may also be made of polyester (col. 4, lines 1-12, conversion done by Examiner). An intermediate adhesive fabric may be placed between the absorber and barrier layers (col.

2, lines 43-44). The barrier layer may be a needlepunched felt (col. 4, lines 13-15). The article of Copperwheat may be used as an automobile liner or headliner (claims 19 and 20). Automobile liners and headliners are subject to extreme heat and cold and serve to insulate the vehicle's passengers from exterior sound. As the article of Copperwheat is thermoformable and meets the structural and compositional limitations set forth in claim 1 the article may serve as a molded acoustic panel. The embodiment disclosed in col. 3, lines 33-53 demonstrates that the additional facing fabric layer **17** (Fig. 1) and its associated adhesive layer **20** (Fig. 1) are not necessary to the invention, but may be included in the further embodiment disclosed in the subsequent paragraph col. 3, lines 54-67. Copperwheat teaches the use of a polyester fiber for the creation of an automobile liner or headliner, but is silent to the use of polyethylene terephthalate.

b. O'Donnell et al. teach the creation of an intermediate web comprising high glass transition polymer fibers that may be used for sound insulation materials (Abstract and [0103]). The web may be made of high glass transition polymers such as polyethylene terephthalate fibers [0009].

c. Since Copperwheat and O'Donnell et al. are from the same field of endeavor (i.e. sound insulative articles), the purpose disclosed by O'Donnell et al. would have been recognized in the pertinent art of Copperwheat.

d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Copperwheat with the motivation of creating a sound insulative article comprising high glass transition polyethylene terephthalate fibers. The skilled artisan would have been motivated by the desire to

successfully create a sound insulative article that is capable of maintaining its structural integrity when exposed to the extreme heat experienced by automobiles.

12. Claims 2, 10 and 15-21 are rejected under 35 U.S.C. 103(a) as unpatentable over Copperwheat (US 6,008,149) as applied to claim 1 above, and further in view of Ramesh et al. (US 2003/0219582).

a. Copperwheat teaches an article comprising a thermoformable fabric (barrier layer) and a layer of variable compression fabric (absorber layer) (Abstract). The absorber layer comprises polyester fibers and is folded into a vertically-lapped fabric of a basis weight of $\sim 63 \text{ g/ft}^2$ and a thickness of 20mm (col. 5, lines 9-19, conversion done by Examiner). The barrier layer may have basis weights of between ~ 13 and $\sim 57 \text{ g/ft}^2$ and may also be made of polyester (col. 4, lines 1-12, conversion done by Examiner). An intermediate adhesive fabric may be placed between the absorber and barrier layers (col. 2, lines 43-44). The barrier layer may be a needlepunched felt (col. 4, lines 13-15). The article of Copperwheat may be used as an automobile liner or headliner (claims 19 and 20). Automobile liners and headliners are subject to extreme heat and cold and serve to insulate the vehicle's passengers from exterior sound. As the article of Copperwheat is thermoformable and meets the structural and compositional limitations set forth in claim 1 the article may serve as a molded acoustic panel. Copperwheat teaches the use of an intermediate adhesive fabric may be placed between the absorber and barrier layers, but is silent to the use of a continuous polyolefin film layer (col. 2, lines 43-44).

b. Ramesh et al. teach a sound and moisture vapor barrier comprising a foam layer (absorber layer) and a film layer (Abstract). By laminating the film layer to the foam

layer the sound transmission is drastically improved and the film acts as a moisture vapor barrier [0032-3]. The film may be made of polyolefins [0034]. The polyolefin film of Ramesh et al. is necessarily continuous in order for it to function as a moisture vapor barrier.

c. Since Copperwheat and Ramesh et al. are from the same field of endeavor, (ie. sound insulative articles), the purpose disclosed by Ramesh et al. would have been recognized in the pertinent art of Copperwheat.

d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the adhesive fabric of Copperwheat with a polyolefin film layer. The skilled artisan would have been motivated by the ability to use the polyolefin film layer as an adhesive layer, taught by Copperwheat, and impart impermeability to the automobile liner. This would be highly advantageous to an article for use in automobiles as vehicles are often exposed to the elements. The interior of an automobile must be resistant to or protective against exposure to the elements because each time a window, door, sunroof, etc. is opened the environmental elements of the automobile's surroundings enter the vehicle and affect its interior. The desire for the invention of Copperwheat is directed to protection against rain, sleet and snow will inevitably enter the car.

e. Although Copperwheat does not explicitly teach the claimed feature of the barrier layer having an airflow resistance from about 200 to about 300 Rayls or less than 100 Rayls, it is reasonable to presume that said properties are inherent to Copperwheat. Support for said presumption is found in the use of like materials (i.e. a barrier layer of

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common materials and basis weights). The burden is upon Applicant to prove otherwise.

In re Fitzgerald 205 USPQ 594. In addition, the presently claimed property of barrier layer having an airflow resistance from about 200 to about 300 Rayls or less than 100 Rayls would obviously have been present one the Copperwheat product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

f. Although Ramesh et al. do not explicitly teach the claimed feature of the polyolefin film having an airflow resistance not less than 5000 Rayls, it is reasonable to presume that said properties are inherent to Ramesh et al. Support for said presumption is found in the use of like materials (i.e. a polyolefin film for use in a sound and moisture vapor barrier). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of the polyolefin film having an airflow resistance not less than 5000 Rayls would obviously have been present one the Ramesh et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner*, et al. (CCPA) 186 USPQ 80.

13. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as unpatentable over Copperwheat (US 6,008,149) in view of Walters et al. (4,581,272).

a. Copperwheat teaches an article comprising a thermoformable fabric (barrier layer) and a layer of variable compression fabric (absorber layer) (Abstract). The absorber layer comprises polyester fibers and is folded into a vertically-lapped fabric of a

basis weight of $\sim 63 \text{ g/ft}^2$ and a thickness of 20mm (col. 5, lines 9-19, conversion done by Examiner). The barrier layer may have basis weights of between ~ 13 and $\sim 57 \text{ g/ft}^2$ and may also be made of polyester (col. 4, lines 1-12, conversion done by Examiner). An intermediate adhesive fabric may be placed between the absorber and barrier layers (col. 2, lines 43-44). The barrier layer may be a needlepunched felt (col. 4, lines 13-15). The article of Copperwheat may be used as an automobile liner or headliner (claims 19 and 20). Automobile liners and headliners are subject to extreme heat and cold and serve to insulate the vehicle's passengers from exterior sound. As the article of Copperwheat is thermoformable and meets the structural and compositional limitations set forth in claim 1 the article may serve as a molded acoustic panel. The embodiment disclosed in col. 3, lines 33-53 demonstrates that the additional facing fabric layer **17** (Fig. 1) and its associated adhesive layer **20** (Fig. 1) are not necessary to the invention, but may be included in the further embodiment disclosed in the subsequent paragraph col. 3, lines 54-67. Copperwheat teaches the use of a needlepunched barrier layer, but is silent to the use of carpet as a barrier layer or a reinforcing scrim layer in the acoustic article.

b. Walters et al. teach a decorative automobile liner or headliner which comprises a laminate with a decorative fabric surface and a scrim between the carpet (barrier layer) and the base layer **26** (Abstract and col. 2, lines 33-45).

c. Since Copperwheat and Walters et al. are both from the same field of endeavor (i.e. automobile liners), the purpose disclosed by Walters et al. would have been recognized in the pertinent art of Copperwheat.

d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Copperwheat with a carpet barrier layer and with a scrim layer posed between the barrier and absorber layers motivated by the desire to create a more aesthetically appealing article with a carpet facing as disclosed by Walters et al. (col. 1, lines 10-15) and the desire to form a composite that retains its structural integrity (col. 1, line 67-col. 2, line 3).

e. Although Copperwheat does not explicitly teach the claimed airflow resistances of the absorber and barrier layers, it is reasonable to presume that the claimed airflow resistance is inherent to Copperwheat. Support for said presumption is found in the use of like materials (i.e. synthetic fiber barrier and absorber layers of the claimed basis weights and thickness.) The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed properties of airflow resistance would obviously have been present one the Copperwheat product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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